MFS Communications Company, Inc.
3000 K. Street N.W., Suite 300
Washington, D.C. 20007
TEL (202) 424-7709
FAX (202) 424-7645
David N. Porter
Vice President, Government Affairs

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RECEIVED

OCT 18 1996

Federal Communications Commission
Office of Secretary

October 17, 1996

DOCKET FILE COPY ORIGINAL

VIA COURIER

William F. Caton, Secretary
Federal Communications Commission
1919 M Street
Washington, D.C. 20554

Re: Notice of Ex Parte Contact by MFS Communications Company, Inc., in CC Docket Nos. 96-45

Dear Mr. Caton:

In accordance with §§ 1.1206(a)(2) of the Commission's Rules, I am filing this letter as notice that I delivered the attached document to the members of the Federal-State Joint Board listed in the attached letter.

If you have any questions or need additional information, please call me at 424-7709.

Sincerely,

David N. Porter

cc: Members of the Federal-State Joint Board
ITS

No. of Copies rec'd 0+1
List ABCDE

MFS Communications Company, Inc.
3000 K. Street N.W., Suite 300
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TEL (202) 424-7709
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David N. Porter
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October 17, 1996

VIA Federal Express, Courier, and Facsimile

Ken McClure (Federal Express)
Martha Hogarty (Federal Express)
Julia Johnson (Federal Express)
Sharon Nelson (Federal Express)
Laska Schoenfelder (Federal Express)
Reed R. Hundt (Courier)
Susan Ness (Courier)
Rachelle B. Chong (Courier)

Re: **Promoting the Deployment of Advanced Telecommunications Services in the Context of Developing Universal Service Goals, CC Docket 96-45**

Members of the Federal State Joint Board:

Broadly speaking, much of the universal service debate confronting the Federal-State Joint Board falls into five major categories:

- Which services or features should be "universally" available;
- How much universal service support is appropriate;
- Who should receive universal service support;
- Who should provide universal service support; and,
- How should support payments and receipts be structured.

In its comments, MFS Communications Company, Inc. ("MFS") offered its opinion about how each of these issues might be addressed in a competitively neutral manner. Nevertheless, there is another statutory element of universal service that has only lightly been addressed by most observers, and MFS is concerned that given the press of both time and complexity of the above issues, the Joint-Board may not focus adequate attention on this sixth element.

The sixth element includes the statutory mandate that state and federal regulators use universal service goals and mechanisms to promote the development and deployment of advanced telecommunications technologies.[1/] Since digital switching and digital, fiber-optic based, interoffice transmission is already widely deployed by most local and interexchange carriers, one might reasonably assume that Congress was addressing the largely analog, copper local loop which impedes the delivery high-speed digital services to customers. In June, MFS asked the staff supporting the Joint Board for an opportunity to bring this issue to the Board. Because MFS has not yet had that opportunity and the time to bring this matter to your attention is rapidly expiring, MFS is using this method to more fully explain its position.

It is important to note that the statutory mandate regarding deployment of advanced telecommunications capabilities does not require that such advanced

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1/ 47 U.S.C. §§ 254(b)(2) (access to advanced services), (b)(3) (rural access to advanced services), (b)(6) (access to advanced services for schools, health care providers and libraries), (h)(2) (advanced services for schools, health care providers and libraries), and, 706 (regulators shall encourage the deployment of advanced telecommunications capabilities). In the comments filed with the Joint Board and the Commission in this docket, many parties indicated that the deployment of advanced, high-speed transmission capabilities were required to give schools, libraries and health care providers adequate access to advanced telecommunications offerings (e.g., the Internet). Access to Communications for Education Coalition Comments at pg. 7; State of Alaska Comments at pp. 10-13; Alaska Library Association Comments at pg. 3; Alaska Public Utilities Commission Comments at pp. 1-6 (28.8Kb should be minimum speed); Alaska Telephone Association Comments at pp. 2-3 (ISDN); America's Carriers Telecommunications Association at pg. 6; American Association of Community Colleges and the Association of Community College Trustees Comments at pp. 10-12 (T1 access, Internet connectivity); American College of Nurse Practitioners Comments at p. 2 (ISDN); American Library Association Comments at pp. 4, 9-12; American Telemedicine Association Comments at pg. 7 (112Kb should be minimum); Ameritech Comments at pp. 14-15; Apple Computer Comments at p. 4 (bandwidths ranging from 128Kb to 45Mb should be made available); BellSouth Comments at pg. 19 (DS1 or 1.544Mb for schools); California Department of Consumer Affairs Comments at pg. 22; California Library Association Comments at pg. 3; Governor of Guam Comments at pp. 7, 10 (ISDN, access to NII); Idaho Public Utilities Commission Comments at pg. 11 (providers should contribute access to the Internet); Iowa Communications Network Comments at pg. 2; Iowa Utilities Board Comments at pg. 2; Kinkos, Inc. Comments at pp. 3-6 (community Internet access should be part of universal service); Lincoln Trail Libraries System Comments at pg. 1; Commonwealth of Massachusetts Board of Library Commissioners Comments at pg. 4; Merit Network, Inc. Comments at pp. 2-3 (ISDN, T1 access); Library of Michgan Comments at pg. 4 (ATM, broadband access); Michgan Library Association Comments at pg. 5 (ATM, broadband access); State of Missouri Comments at pp. 1-3 (Internet, teleconferencing capabilities); Mountaineer Doctor Television Telemedicine Program at West Virginia University (T-1 access, ISDN, ATM); National School Boards Association et al. Comments at pp. 13-14, Appendix I (unbundled broadband switching and transmission capable of delivering high-quality video); Nebraska Association of Hospitals and Health Systems Comments at pg. 1 (384Kb minimum, 1.544Mb more likely); New York State Board of Regents and new York Education Department Comments at pg. 11 (broadband on demand); North of Boston Library Exchange, Inc. Comments at pg. 1 (T-1, T-3 access); North Dakota Department of Health Comments at pg. 1 (ISDN); Oakland Unified School District Comments at pp. 10, 13 (T-1 access); Pacific Telesis Comments at pp. 3-6, 8-11 (ISDN provided to schools); U.S. Distance Learning Association Comments at pp. 9-12; US West Comments at pp. 21-23 (56/64Kb on request); and State of Wisconsin Department of Public Instruction Comments at pg. 1.

services shall be supported by federal universal service support mechanisms, as are required for services that "have ... been subscribed to by a substantial majority of residential customers."[2/] Rather, in rural areas it calls for "access to advanced services ... that are reasonably comparable to those services provided in urban areas."[3/] Said differently, the deployment of advanced telecommunications capabilities need not be a component of universal service that is eligible for extraordinary support or subsidies.

In its comments in this proceeding, MFS urged the Joint Board and the Commission to encourage the deployment of advanced telecommunications capabilities by establishing minimum network standards for all local exchange carriers that generally mirrored the advanced capabilities established by Congress for borrowers under the Rural Electrification Loan Restructuring Act of 1993 ("RELRA").[4/] The RELRA requires state or territorial public utility commissions or borrowers to develop network modernization plans as a prerequisite for otherwise eligible carriers to receive federally subsidized loans for telecommunications utilities. The Act specifically requires that

> "a telecommunications modernization plan must, at a minimum, meet the following objectives:
> (i) The plan must provide for the elimination of party service.
> (ii) The plan must provide for the availability of telecommunications services for improved business, educational, and medical services.
> (iii) The plan must encourage and improve computer networks and information highways for subscribers in rural areas.
> (iv) The plan must provide for --
> (I) subscribers in rural areas to be able to receive through telephone lines --
> (aa) conference calling;
> (bb) video images; and,
> (cc) data at a rate of at least 1,000,000 bits of information per second; and,
> (II) the proper routing of information to subscribers."[5/]

2/ Compare 47 U.S.C. § 254(b)(2) and (3) with § 254(c)(1)(B).

3/ 47 U.S.C. § 254(b)(3).

4/ 107 Stat. 1356, codified in 7 U.S.C. § 935 (1994).

5/ 7 U.S.C. §935(d)(3)(B). [emphasis added]

The Rural Utilities Service ("RUS") has promulgated rules implementing the above statute.[6] Implementation plans from thirty-eight states and territories have been filed with and approved by the RUS. These network modernization standards unambiguously articulate the minimum standards that Congress defines as the prerequisite for federal rural telephone loans, and the 38 state plans reflect the network standards state commissions or borrowers believe are appropriate for rural carriers in their states. Clearly, if Congress set these minimum standards for rural telephone companies, they should also be the minimum standard for all local telecommunications providers. Said differently, it would not be sensible telecommunications policy to hold rural telephone utilities to a standard higher than that required of other telecommunications providers.

The Joint Board has a unique opportunity to assure that universal service works to the benefit of both rural and urban customers because the nation's smallest telephone companies -- those eligible to receive loans from the RUS -- already have committed to meet the network design standards that permit transmission through telephone lines of video images and data at a rate of at least 1 megabit per second. MFS recommends that the same network standards be incorporated in the Joint Board and Commission's universal service policies. Compliance with the advanced network standards required of rural telephone companies (*i.e.*, lines capable of transmitting video images and minimum data transmission speeds of 1 megabit per second) will go a long ways towards addressing the high-speed, broadband capabilities needed by schools, libraries and rural health care providers identified by many commentors. More recently, the Secretaries of Education, Agriculture and Commerce filed an *ex parte* in this proceeding urging the Commission and Joint Board to consider a proposal aimed at ensuring economical, high-speed access to advanced offerings, such as the Internet.[7] Adopting the RELRA standards would certainly advance the needs described by Secretaries Riley, Glickman and Kantor in their letter.

Just as compliance with the statutory network standards is a prerequisite for receiving federal rural telephony utility loans, compliance with these minimum network standards should be a prerequisite for receipt of federal universal service funds. Such a requirement would also be consistent with the Commission's conclusions in its Interconnection Order that "the local loop element ... includes ... loops that are

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[6] 7 C.F.R. §1751.106 *et seq.*

[7] Joint letter from Secretary of Education Richard Riley, Secretary of Agriculture Daniel Glickman and Secretary of Commerce Michael Kantor to Reed Hundt dated Oct. 10, 1996.

conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL, and DS-1 level signals ... to the extent technically feasible."[8/]

Through a Freedom of Information Act request, MFS obtained the attached documents from the RUS, that may be of interest to the Joint Board and the Commission as they develop their universal service policies.

- **Attachment 1**. Status of Telecommunications Modernization Plans as of September 12, 1996. This matrix, prepared by the RUS, shows the status of various telecommunications modernization plans by state.

- **Attachment 2**. New Mexico State Telecommunications Modernization Plan. This was a plan developed by borrowers in New Mexico, which is has a substantial number of rural, low income telecommunications customers. Note that in the plan, the companies indicate commitment to a non-loaded loop architecture (*i.e.*, loops free from electronics, bridge coils or other impediments to high-speed offerings) that will allow them to "take advantage of emerging technologies like PCS, BISDN and ADSL."[9/]

- **Attachment 3**. An order of the Alaska Public Utilities Commission adopting regulations that implement the RUS's requirements.[10/] It is hard to imagine a state that has more inaccessible, high-cost populations than Alaska. In spite of the obvious challenges of providing telephone service in Alaska, the Alaska Commission adopted rules that require

> "By February 13, 2003,
> (1) a telephone company shall provide
> (A) service using switching equipment that can provide E911 service when requested by the governmental agency responsible for that service and
> (B) one-party service upon demand to subscribers; and

8/ Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order, CC Docket 96-98, ¶¶ 380-381 (Aug. 1, 1996).

9/ New Mexico State Telecommunications Modernization Plan, pg. 2 (Jan. 16, 1996).

10/ In the Matter of the Development of a State Telecommunications Modernization Plan for Presentation to the Rural Utilities Service, United States Department of Agriculture, Order No. 5, R-95-4 (Nov. 22, 1995).

(2) a telephone company shall provide an end-to-end data transfer rate of no less than 28.8 kilobits per second.
(3) a telecommunications provider shall provide switched digital service that operates at a rate of at least 56 kilobits per second to any customer upon request.

A telecommunications provider shall work towards

(1) elimination of party-line service and
(2) universal availability, upon request, of digital voice and data service of at least 56-164 kilobits per second; transmission and reception of high-bit-rate (no less than 1 megabit per second) data; and reception of video as described in (e) of this section."[11/]

It is hard to imagine why the standard that applies to telephone companies serving the remote areas of Alaska should not also apply to every other telephone company in the United States.

- **Attachment 4**. State Telecommunications Modernization Plan for Illinois.[12/] This plan, which was prepared by the borrower telephone companies in Illinois commits to provide for "customers in rural areas to be able to receive, over telephone lines, such services as: video images; data at the rate of at least one million bits of information per second provided that proper electronics and switching facilities are connected to the network facilities being placed."[13/]

- **Attachment 5**. Telecommunications Modernization Plan for the Territory of Guam, which was prepared by Bellcore.[14/] In the short term (1997-2001) the Guam Telephone Authority has committed to provide

> "Through the use of remote switching centers and because of the relatively small size of the island, most subscriber loops are short enough to enable the use of High-bit-rate Subscriber Line (HDSL)

11/ Id. Appendix B, pg. 7.

12/ State Telecommunications Modernization Plan, State of Illinois (June 21, 1996).

13/ Id. At pg. 2.

14/ Telecommunications Modernization Plan for the Territory of Guam (November 13, 1995).

> technologies to provide two-way data transmissions at rates of at least 1 Mb/s. All new loop facilities are capable of supporting HDSL since at least three pairs of wires are placed to every customer premises."[15/]

It seems reasonable to apply the same telecommunications network modernization standards to other "island" telephone companies -- like the phone companies serving Manhattan.

MFS had hoped to provide and discuss this material with the Joint Board earlier in the process (and made a request in June to discuss these materials), however, the press of other issues confronting the Joint Board, and delays in obtaining information through the Freedom of Information Act, made it impossible to present this material any earlier.

In the interest of efficiency and to timely provide this information to all members of the Joint Board, MFS is providing a copy of this *ex parte* letter to FCC and State Staff members serving on the Joint Board via courier or facsimile. However, the attachments are being provided only to the Commissioners listed above. If a Staff member wishes to obtain a copy of any of the attachments, we will gladly provide them.

If the Commission, the Joint Board or any of the affiliated Staff have any questions or would like to discuss these matters, please call me at the phone number listed below.

Respectfully submitted

David N. Porter

David N. Porter
Vice President, Government Affairs

MFS COMMUNICATIONS
COMPANY, INC.
3000 K Street, N.W., Suite 300
Washington, DC 20007
(202) 424-7709

15/ Id. at pg. 10.

Copies were sent via facsimile or courier to the following State/FCCI Staff members:

State Staff Members (facsimile)
Paul Pederson
Charles Bolle
Deonne Bruning
Lori Kenyon
Debra Kriete
Mark Long
Sam Loudenslager
Sandra Makeef
Phillip McClelland
Michael McRae
Terry Monroe
Lee Palagyi
Barry Payne
Brad Ramsey
Brian Roberts

FCC Staff Members (Courier)
John Nakahata
James Cassedy
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Alex Belinfante
Lisa Boehley
John F. Clark
Bryan Clopton
Anna M. Gomez
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L. Charles Keller
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Diane Law
Robert Loube
Tejal Mehta
John Morabito
Mark Nadel
Kimberly Parker
Jeanine Poltronleri
Michael Pryor
Gary Seigel
Richard Smith
Pamela Szymczak
Whiting Thayer
Lori Wright

ATTACHMENT 1
STATUS OF TELECOMMUNICATIONS MODERNIZATION PLANS

STATE TELECOMMUNICATIONS MODERNIZATION PLANS
STATUS AS OF SEPTEMBER 12, 1996

State	Status	Approval Date
Alabama	• Borrower-developed Plan	April 11, 1996
Alaska	• State-developed Plan	December 7, 1995
Arizona	• Borrower-developed Plan	May 3, 1996
Arkansas	• Borrower-developed Plan	July 12, 1996
California	• Borrower-developed Plan	March 15, 1996
Colorado	• Borrower-developed Plan submitted 8/15/96	
Florida	• Borrower-developed Plan	June 7, 1996
Georgia	• Borrower developed Plan	May 3, 1996
Guam	• State-developed Plan for RUS borrowers	January 18, 1996
Hawaii	• State-developed Plan for RUS borrowers	February 13, 1996
Idaho	• State-developed Plan for RUS borrowers	February 14, 1996
Illinois	• Borrower-developed Plan	July 9, 1996
Indiana	• Borrower-developed Plan	March 1, 1996
Iowa	• Borrower-developed Plan	March 1, 1996
Kansas	• Borrower-developed Plan	February 14, 1996
Kentucky	• Borrower-developed Plan	March 18, 1996
Louisiana	• Borrower-developed Plan0	March 18, 1996
Maine	• State will not develop Plan • RUS acknowledges 8/31/95 • Borrower-developed draft Plan submitted 4/15/96 • RUS comments returned 5/16/96	
Maryland	• Borrower developed draft Plan submitted 9/12/96	
Massachusetts		
Michigan	• State-developed Plan for RUS borrowers	January 25, 1996
Minnesota	• Borrower-developed Plan	February 22, 1996
Mississippi	• Borrower-developed Plan	April 11, 1996
Missouri	• Borrower-developed Plan	May 30, 1996
Montana	• Borrower-developed Plan	April 19, 1996
Nebraska	• State will not develop Plan • RUS acknowledges 12/20/95	
Nevada		
New Hampshire	• Borrower-developed Plan	April 8, 1996
New Jersey		
New Mexico	• Borrower-developed Plan	February 14,1996
New York	• Borrower-developed Plan	February 14, 1996
North Carolina	• State will not develop Plan • RUS acknowledges 6/23/95 • Borrower-developed proposed Plan submitted 5/30/96 • RUS comments returned 6/12/96 • Revised Borrower developed Plan submitted 9/4/96	
North Dakota	• Borrower-developed Plan	February 27, 1996

Northern Mariana Islands		
Ohio	• Borrower-developed Plan	March 15, 1996
Oklahoma	• State-developed Plan for RUS Borrowers	February 13,1996
Oregon	• Borrower-developed Plan	February 14, 1996
Pennsylvania	• State-developed Plan for RUS borrowers	February 9,1996
Puerto Rico		
South Carolina	• Borrower-developed Plan	May 23, 1996
South Dakota	• Borrower-developed Plan	February 14,1996
Tennessee	• State-developed Plan for RUS borrowers	February 13, 1996
Texas	• Borrower-developed Plan	March 18, 1996
Utah	• [illegible] Plan • [illegible]	
Vermont	• State-developed Plan for RUS Borrowers	February 14, 1996
Virginia	• Borrower-developed Plan	March 25, 1996
Virgin Islands	• Borrower-developed Plan	July 17, 1996
Washington	• [illegible] Plan • [illegible] • [illegible] Plan submitted [illegible] • [illegible] by phone [illegible] • [illegible] comments 3/13/96	
West Virginia	• [illegible] Plan • [illegible] • [illegible] draft Plan submitted 9/12/96	
Wisconsin	• Borrower-developed Plan	March 29, 1996
Wyoming	• Borrower-developed Plan	February 29, 1996

Note: All approved state-developed Plans were submitted on or before February 13, 1996, the date when state's eligibility to submit Modernization Plans expired.

MODERNIZATION PLANS AS OF SEPTEMBER 12, 1996

51 POSSIBLE
38 APPROVED

9 Approved State-developed Plans

Alaska	**Guam**	**Hawaii**
Idaho	**Michigan**	**Oklahoma**
Pennsylvania	**Tennessee**	**Vermont**

29 Approved Borrower-developed Plans

Alabama	**Arkansas**	**Arizona**
California	**Florida**	**Georgia**
Illinois	**Indiana**	**Iowa**
Kansas	**Kentucky**	**Louisiana**
Minnesota	**Mississippi**	**Missouri**
Montana	**New Hampshire**	**New Mexico**
New York	**North Dakota**	**Ohio**
Oregon	**South Carolina**	**South Dakota**
Texas	**Virginia**	**Virgin Islands**
Wisconsin	**Wyoming**	

6 Borrower Group Plans in progress

Colorado	**Maine**	**Maryland**
North Carolina	**Washington**	**West Virginia**

7 Borrower groups with no written action

Massachusetts	**Nebraska**	**Nevada**
New Jersey	**Northern Mariana Islands**	**Puerto Rico**
Utah		

ATTACHMENT 2
NEW MEXICO STATE TELECOMMUNICATIONS MODERNIZATION PLAN

HICKS & RAGLAND
ENGINEERING CO., INC.
P.O. BOX 65800
LUBBOCK, TEXAS 79464-5800
(806) 791-7600
FAX (806) 793-1154

January 16, 1996

RE: New Mexico 600
P&S #32-600-01-000
New Mexico Modernization Plan

VIA EXPRESS COURIER

Mr. Orren E. Cameron
Director, Telecommunications Standards Division
Rural Utilities Service
U.S. Department of Agriculture
Room 2850 - South Agriculture Building
14th & Independence Avenue, S.W.
Washington, D.C. 20250

Dear Mr. Cameron:

Attached is the proposed State Telecommunication Modernization Plan for the Rural Utilities Service (RUS) borrowers in New Mexico. This Plan is being submitted on behalf of a majority of the RUS borrowers (signatures attached) for your review in accordance with 7 CFR 1751.

Any questions, comments, or requests for resubmittal should be directed to me at this office. Thank you for your consideration in this matter.

Sincerely,

HICKS & RAGLAND ENGINEERING CO., INC.

BY _____
Steven Steele, P.E.
Vice President

LSS/bjv
enc.

file: g:\32600\11600lv.rus

NEW MEXICO
State Telecommunications Modernization Plan
Developer: RUS Borrowers of New Mexico

Introduction and Definitions

Introduction

On February 13, 1995, the Rural Utilities Service (RUS, formerly the REA), an agency of the Department of Agriculture, published Final Rule 7 CFR Part 1751, entitled "Telecommunications System Planning and Design Criteria, and Procedures." The rule responds to the Rural Electrification Loan Restructuring Act of 1993 (RELRA). The plan being submitted herein, of which this introduction is a part, addresses those requirements and is being submitted to comply with the rule. This plan was developed by a majority of the New Mexico RUS borrowers and applies only to RUS borrowers.

Definitions

The definitions for the terms in this plan are those established by the RUS and set forth in 7 CFR Part 1751.100.

I. Goals

Vision Statement

It is the objective of the New Mexico RUS borrowers to provide affordable high quality communications services to their subscribers. In so doing, this level of quality, commitment and services will become the standard by which other communications providers in the state of New Mexico are measured.

Because of the remote nature of the subject service areas, the primary objective is reliable basic telecommunications services. Additionally, these subscribers will want information and entertainment technology and services in their homes, schools and businesses which will provide the necessary tools for economic development and components for quality of life.

It is envisioned that these services will utilize wideband and broadband technologies. These technologies will require nonloaded loops, fiber and, in the more distant future, possibly coaxial physical facilities for transport of increasingly high bandwidth services. It is also envisioned that rapid advances in the capabilities of optical and electronic equipment will provide improved economics in the delivery of these services.

The RUS borrowers of New Mexico are committed to the deployment of these services. The challenge foreseen will be to utilize network architectures and equipment which will be applicable to future services in solving the needs of today.

Engineering Description of Network Contemplated

All companies will build toward a digital network with digital interconnections with connecting companies. All new switches will be digital and capable of E911.

Each company will have a master pattern of electronic sites that would be capable of providing non-loaded plant to each subscriber. This master pattern is called a Carrier Serving Area (CSA) design. A CSA design uses field deployed electronic sites at local wire centers to convert signals to digital format for transmission to the central office. The CSA design requires all subscribers be within non-loaded loop limits, thus digital service can be extended to the customer premise. These CSA sites will become the plan for adding electronic sites as growth occurs or demand for future services materializes. Digital electronics will be deployed to these CSA sites, and digital facilities used to connect them to the switching centers in accordance with a CSA architecture.

The commitment to a CSA designed, nonloaded loop architecture will provide the most effective and timely deployment scheme available. As construction is required, it will be done within the parameters of the OSA design without regard to rural or urban status. Any fiber construction will provide CSA service loops at every CSA along the route in urban or rural areas.

By utilizing the CSA design architecture, network facilities will inherently be positioned to take advantage of emerging technologies like PCS, BISDN, and ADSL. Positioning electronic sites utilizing the CSA architecture will provide distribution points for future technologies even if the electronics have to be upgraded or replaced.

As optical and digital technologies advance, it is expected that these technologies will be the basis for future services. Demand for these future services will require examination of Frame Relay, ATM and other packetized transport protocols. Electronic equipment and central office purchases will be made with consideration to upgrade, enhancement or compatibility with these emerging technologies.

Each company will only purchase switching equipment that has the capability of providing SS7 type trunks, with the addition of hardware or software. This will allow future rapid deployment of the Advance Intelligent Network (AIN).

Each company shall expeditiously complete the orderly elimination and replacement of open wire facilities.

Each company shall work diligently to upgrade facilities to eliminate analog station carrier equipment. If all station carrier can not be removed, it should be deployed in such a method that a subscriber requesting services not available over station carrier can be easily and quickly switched to a type of equipment that would accommodate the request.

Each company will deploy fiber optic facilities as economically feasible to assure high transport capacity and quality for future services.

II. Organizations to be covered by the Plan

A. List of RUS Borrowers
Appendix A

III. Provisions for emerging technologies

The design of the network provided by the subject Telecommunications Providers shall allow for the expeditious deployment and integration of such emerging technologies as may from time to time become commercially and economically feasible.

IV. Guidelines for affordable tariffs for distance learning and medical link service

Each company, in working with customers and the New Mexico State Corporation Commission (NMSCC), as appropriate, will support efforts in deploying distance learning and medical link services. Upon customer request and assuming economic feasibility, each company will make available these services with prices, under tariffs or contract, as appropriate, that are affordable for those customers utilizing those services.

V. Service Deployment

Only the minimum feasible interval of time, shall separate availability of the services in rural and nonrural areas if the services cannot be deployed at the same time.

VI. Reliability of basic services

The Borrowers shall be committed to providing highly reliable basic telephone service. The level of reliability shall meet or exceed the reliability of the current network. To ensure the high reliability, Borrowers shall make all reasonable provisions for reliable powering of the following network elements:

Subscriber Terminal Equipment

For telephone company provided subscriber terminal equipment, the Borrowers shall make all reasonable efforts to ensure reliable powering. The following guidelines will be used in resolving the powering issue:

1. The first choice for subscriber terminal equipment powering will be network powering.

2. If network powering is not available, or the terminal equipment is not capable of being network powered, the telephone company will provide battery backup.

Network Elements (other than Central Office Equipment)

For electronic sites (such as Remote Digital Terminals or Optical Network Units) which use local AC powering, the Borrowers will provide battery backup which meets the backup time of the serving Central Office. For economic considerations, the battery backup may be supplied from a centralized site.

VII. Requirements

Short Term

The New Mexico Borrowers shall meet the short term requirements as stated in 7 CFR Part 1751.106 (Current as of February 13,1995).

MEDIUM TERM

The New Mexico Borrowers shall meet the medium term requirements as stated in 7 CFR 1751.106 (Current as of February 13,1995). "Reasonable motion video" mentioned in 1751.106 shall be defined by the industry standards for MPEG-1 and shall, as a minimum, meet MPEG-1 standards for frame rate, resolution, audio, and other measures of quality.

VIII. Long Term Goals

In the long term, it is anticipated that technologies used to deliver data and video will have advanced so that subscribers will have choices available for delivery over BISDN, fractional T1 or full T1 depending on frame speed desired, application, and cost. These technologies and others are under consideration for deployment over nonloaded loop in the OSA network architecture.

For broadband services, technologies are being carefully observed for delivery over nonloaded loop. However, if these emerging' technologies do not prove practical or economical, coaxial or optical distribution can be used in the OSA network architecture if subscriber demand or other supporting factors makes such deployment economically feasible.

ATTACHMENT 3
ORDER OF THE ALASKA PUBLIC UTILITIES COMMISSION

STATE OF ALASKA

DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

ALASKA PUBLIC UTILITIES COMMISSION

TONY KNOWLES, GOVERNOR

1016 WEST SIXTH AVENUE, SUITE 400
ANCHORAGE, ALASKA 99501-1963
PHONE: (907) 276-6222
FAX: (907) 276-0160
TTY: (907) 276-4533

November 22, 1995

Mr. Orren E. Cameron, III, Director
Telecommunications Standards Division
U.S. Department of Agriculture
Rural Utilities Service
14th and Independence Avenues, S.W.
Room 2835-S
Washington, D.C. 20250-1500

Dear Mr. Cameron:

Enclosed please find three certified copies of the Order Adopting Regulations (Order No. 5 in Docket R-95-4 dated November 22, 1995), concerning the development of a State Telecommunications Modernization Plan (STMP) for presentation to the Rural Utilities Service. While the RUS did not require the STMP to be developed in regulatory format, the Commission elected to develop the plan in this way to ensure the widest possible dissemination of notice of the STMP to all affected interests. This approach also makes it clear that the Commission has authority to enforce the elements of the plan.

The Commission staff appreciated the opportunity to discuss with you and your staff the concepts embodied in this modernization plan. I believe as a result that there will be no surprises within.

I appreciate your consideration of this plan. If it meets with your approval, the Commission looks forward to receiving your notice of approval.

Sincerely,

Robert A. Lohr
Executive Director
apucl@alaska.net

STATE OF ALASKA

THE ALASKA PUBLIC UTILITIES COMMISSION

Before Commissioners: Don Schröer, Chairman
Alyce E. Hanley
Dwight D. Ornquist
G. Nanette Thompson
Sam Cotten

In the Matter of the Development of a State Telecommunications Modernization Plan for Presentation to the Rural Utilities Service, United States Department of Agriculture	R-95-4 ORDER NO. 5

ORDER ADOPTING REGULATIONS

BY THE COMMISSION:

By Order R-95-4(1), dated July 14, 1995, the Commission opened this Docket and issued a notice of inquiry for the purpose of developing a State Telecommunications Modernization Plan (STMP) for Alaska. That Order also contained a detailed discussion of the requirements of the Rural Utilities Service (RUS), United States Department of Agriculture, for such a plan. (*See also,* 7 U.S.C.A. 935 *et seq.* (Pub.L. 103-129, Nov. 1, 1993, 107 Stat. 1356) and 7 C.F.R. Part 1751).

In that Order, the Commission noted the extremely short time frame between its preparation and adoption of an STMP and the deadline for RUS approval of such a plan. Thus, the Commission stated that it intended to have a draft STMP prepared for public review and comment by September 15, 1995, and requested each interexchange carrier (IXC) and local exchange carrier (LEC)

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certificated to operate in Alaska to file, either jointly or separately, written comments and proposals addressing specific STMP questions and issues. Those responses as well as general comments in response to the notice of inquiry were required by August 15, 1995.

By Order R-95-4(2), dated August 25, 1995, the Commission, among other things, granted an extension of time for filing comments and clarified Order R-95-4(1) to require those LECs and IXCs with greater than 10 percent market share to provide information regarding how the adoption of the RUS standards in the STMP would affect their respective utilities. In Order R-95-4(2), the Commission also noted that not all the filings requested by Order R-95-4(1) had been submitted and required that the missing information be filed. In Order R-95-4(2), the Commission stated that its initial goal in this proceeding was to develop an STMP that met the needs of all Alaskans statewide in an efficient, economical, and reasonable manner and provided for compliance with RUS requirements. In that Order, the Commission also stated that it was not the Commission's intent to suggest that Alascom, Inc. d/b/a AT&T Alascom (Alascom) and other non-RUS borrowers were directly subject to RUS requirements, rather that those companies may be requested to comply with an STMP that incorporated in part or in whole the RUS standards.

By Order R-95-4(3), issued September 1, 1995, the Commission, among other things, clarified filing requirements and

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granted the extended deadline by which the several responses and comments were due. However, the Commission noted that that extension would not delay development and issuance of an initial draft STMP plan for public comment.

Since September 14, 1995, the Commission has received comments from General Communication, Inc. (GCI), a majority of the LECs, and the public. A summary of comments filed in response to Order R-95-4(2) by Commission Staff (Staff) is attached to this Order as Appendix A. In its September 15, 1995, comments Alascom requested that the Commission clarify whether an STMP would be adopted in the form of regulations and, if so, that the scope of those regulations be defined. Subsequently, GCI filed comments in support of Alascom's request for clarification.

The Commission met in Emergency Public Meeting on September 21, 1995, to discuss a set of STMP regulations proposed by Staff. At its Emergency Public Meeting, the Commission determined that, with minor amendments, Staff's proposed regulations should be issued for public notice and set for public hearing. The amendments were to clarify that the interexchange carriers to which the proposed regulations were applicable were those that are facilities-based; to define the term "commercially feasible" as used in the regulations; and to clarify the STMP requirements and the timing thereof. Staff noted that the comments filed since September 14, 1995, had not been considered in its proposed regulations because of insufficient time for

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review and consideration. The Commission determined that the comments would be considered, along with others received in response to notice of the proposed regulations, before regulations were finally adopted.

By Order R-95-4(4), issued September 29, 1995, the Commission issued proposed regulations and established a schedule for public comments and hearing. Order R-95-4(4) summarized the proposed regulations to be released for public comment and contained, as an appendix, a copy of the proposed regulations. The Commission specifically requested comment on the application of the regulations and the cost impact of complying with them. The Commission also stated that, because of the joint use and interconnection of the switched network in Alaska and the end-to-end transmission criteria of the proposed regulations, the STMP regulations were proposed to apply to all certificated LECs and certificated facilities-based IXCs. The Commission stated that this application also appeared appropriate as Cordova Telephone Cooperative, Inc., an unregulated utility, but an RUS borrower, would arguably be governed by this state's STMP. A list of the LECs and IXCs to which these proposed regulations would apply was also appended to Order R-95-4(4).

A public hearing was held on November 3, 1995, at which time individuals presented oral comment regarding the proposed STMP regulations. Comments were received from GCI; Alascom; Alaska Telephone Association; Charles Beckley representing the

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